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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,907	02/03/2004	Shunpei Yamazaki	07977-302002	9780
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EXAMINER				
TRAN, BINH X				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
09/12/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/769,907

Applicant(s)

YAMAZAKI ET AL.

Examiner

Binh X. Tran

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5-21-2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-51 is/are pending in the application.
- 4a) Of the above claim(s) 23, 24, 26-27 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-30, 49 and 50 is/are allowed.
- 6) ☒ Claim(s) 22, 25, 31-48 and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/072,310.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/08/2008; 02/19/2008; 11/28/2007; 03/22/2007; 11/06/2006; 02/17/2006; 10/20/2004; 02/03/2004 .

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species A (claims 22, 25, 28-51) in the reply filed on 5-21-2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 23-24, 26-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5-21-2008.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 31-48, 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 31 and 32, "the same formation chamber" is indefinite because it is unclear which specific formation chamber (first, second, and third) that applicants wish to refer. Further, claims 31 and 32 depend on claim 28 and 29 respectively. In independent claim 28 and 29, applicants recites that the first organic compound is formed in the first formation chamber; and the second organic compound is formed in a second formation chamber. However, in claims 31-32 applicants provide a contradicted limitation by specifying the first and second organic compound are formed in the same chamber. Once, applicants recites that the first organic compound and the second organic compound are formed in different formation chamber (i.e. first formation chamber vs. second formation chamber). Applicants cannot provide a contradicted limitation by stating that the first organic compound and second organic compound are formed in the same formation chamber.

Claims 33-48 are indefinite because they directly or indirectly depends on indefinite claim 31 or 32.

Claim 51 depends on claim 50. It is unclear from claim 51, that the phrase "an alignment unit" of claim 51 is the same "alignment unit" of claim 50 or not. If claim 51 uses differ "alignment unit" than claim 50, the examiner suggests applicants to use "first alignment unit" (for claim 50) and "second alignment unit" (for claim 51) in order to avoid any confusion.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldman et al. (US 5,039,657) in view of Ichikawa (US 6,022,458).

Respect to claim 22, Goldman discloses a method comprising:
simultaneously operating first evaporating means and second evaporations means in the film formation chamber (col. 10 lines 16-25, fig 1, col. 9);

wherein the first evaporation means comprises a first plurality of evaporation source and the second comprises a second plurality of evaporation source (Fig 1, evaporations source such as ozone generator, barium, copper and yttrium).

wherein the film formation chamber is connected with first exhausted means and second exhausted means (i.e. cryopump, ion pump and/or turbo pump).

Goldman fails to disclose the inner wall of the film formation chamber is electrolytic polish. Ichikawa teaches the chamber surface is subjected to electrolytic

polish in order enhance to coating process and prevent impurities (col. 7 lines 51 to col. 8 line 13). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify Goldman in view of Ichikawa by electrolytic polishing the surface of the chamber because it will enhance the coating process and prevent impurities.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldman et al. (US 5,039,657) in view of Ichikawa (US 6,022,458) and further in view of Ohmi et al. (US 6,215,806).

Respect to claim 25, Goldman discloses a method comprising:

simultaneously operating first evaporating means and second evaporations means in the film formation chamber (col. 10 lines 16-25, fig 1, col. 9);

wherein the first evaporation means comprises a first plurality of evaporation source and the second comprises a second plurality of evaporation source (Fig 1, evaporations source such as ozone generator, barium, copper and yttrium).

wherein the film formation chamber is connected to with a cryopump, and dry pump (i.e. ion pump and/or turbo pump).

Goldman fails to disclose the inner wall of the film formation chamber is electrolytic polish. Ichikawa teaches the chamber surface is subjected to electrolytic polish in order enhance to coating process and prevent impurities (col. 7 lines 51 to col. 8 line 13). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify Goldman in view of Ichikawa by electrolytic polishing the surface of the chamber because it will enhance the coating process and prevent impurities.

Goldman and Ichikawa differ from claim 25 by further disclosing the average surface roughness of the inner wall is 5 nm or less. However, Ichikawa clearly discloses the roughness of less than 0.1 μm (col. 7 lines 55-60). Ohmi teaches to electro-polish a metal surface to have a roughness of less than 0.1 μm , preferable less than 0.01 μm in order to improve corrosion resistance, including a roughness of 5 nm (col. 2 lines 25-30, col. 4 lines 18-30, col. 7 lines 55-60, col. 9 line 50-54). It would have been obvious to one having ordinary skill in the art, at the time of invention, to select a proper roughness value because it has been held that there is no invention where the difference is not critical and was ascertained by routine experiment because determination of workable ranges is not considered inventive. Further, Ohmi clearly teaches to reduce surface roughness because it will improve corrosion resistance (col. 7 lines 55-60).

Allowable Subject Matter

9. Claims 28-29, 49-50 are allowed.
10. Claims 31-48, 51 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
11. The following is a statement of reasons for the indication of allowable subject matter: The cited prior arts fail to disclose or suggest vapor depositing a plural kinds of organic compounds simultaneously, and successively changing a concentration of each of the plural kinds of organic compounds to form a third organic compound film in a third

film formation chamber which includes a plurality of evaporation sources in combination with all other limitations in the claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh X. Tran whose telephone number is (571) 272-1469. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Binh X Tran
Primary Examiner
Art Unit 1792

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Primary Examiner, Art Unit 1792

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